CONTENTS, VOLUME 85, 1983

NUMBER 1 (February)

Dynamics of Incubation in Mountain White-crowned Sparrows ... *Eileen Zerba* and *Martin L. Morton* 1
Breeding Biology of the Xantus' Murrelet ... *Kelvin G. Murray, Kathy Winnett-Murray, Zoe A. Eppley, George L. Hunt, Jr.,* and *Douglas B. Schwartz* 12
Relationships between Tidal Oscillations and Ruddy Turnstone Flocking, Foraging, and Vigilance Behavior ... *Robert C. Fleischer* 22
Quantitative Analysis of Prairie Grouse Vocalizations ... *Donald W. Sparling* 30
Influence of Incubation Calls on Post-hatching Responses of Pheasant Chicks ... *E. D. Bailey* 43
Hatching of Forster's Terns ... *Martin K. McNicholl* 50
Effects of Dietary Protein Levels on Body Weight, Food Consumption, and Nitrogen Balance in Ruffed Grouse ... *Patrick R. Beckerton* and *Alex L. A. Middleton* 53
The Metabolic Rate of Tropical Birds ... *C. J. Hails* 61
Nesting Ecology of Thick-billed Parrots ... *Dirk V. Lanning* and *James T. Shiflett* 66
Survival of Mallard Broods in South-central North Dakota ... *Larry G. Talent, Robert L. Jarvis,* and *Gary L. Krapu* 74
Status of a Northern Population of California Brown Pelicans ... *Daniel W. Anderson* and *Franklin Gress* 79

SHORT COMMUNICATIONS

Melampitta gigantea: Possible Relation between Feather Structure and Underground Roosting Habits ... *Jared M. Diamond* 89
Spontaneous Blink Rates of Birds ... *Suzanne J. Kirsten* and *Edward B. Kirsten* 92
Nest Predation in Insular and Mainland Lowland Rainforest in Panama ... *Bette A. Loiselle* and *William G. Hoppes* 93
Additions to the Avifauna of Bolivia, Part 2 ... *J. V. Remsen, Jr.* and *Melvin A. Traylor, Jr.* 95
Fledging Dates and Southward Migration of Juveniles of Some *Calidris* Sandpipers ... *Dennis R. Paulson* 99
Plumage Characteristics of Juvenile Black-chinned Hummingbirds ... *Frank A. Baldridge* 102
A New Age- and Sex-specific Molt Scheme for the Red-winged Blackbird ... *Hamilton Greenwood, Patrick J. Weatherhead* and *Rodger T. Titman* 104
Mate Replacement in Purple Martins: Little Evidence for Altruism ... *Charles R. Brown* 106
Water Loss from Pipped Wedge-tailed Shearwater Eggs ... *T. N. Pettit* and *G. C. Whittow* 107
Variation in the Egg Markings of the Brown-headed Cowbird ... *Alfred M. Dufty, Jr.* 109
Seasonal Variation in Nest Placement of Abert's Towhees ... *Deborah M. Finch* 111
Flight Song and Song Flight in the Orange-crowned Warbler ... *William M. Gilbert* 113
INFORMATION FOR CONTRIBUTORS ... 114
NEWS AND NOTES ... 116
RECENT PUBLICATIONS ... 29, 49, 60, 65, 73, 118

NUMBER 2 (May)

Foraging Niches and the Structure of Forest Bird Communities in Contrasting Montane Habitats ... *Stephen R. Sabo* and *Richard T. Holmes* 121
Feeding Rates of Warblers in Spring ... *Jean W. Graber* and *Richard R. Graber* 139
Behavioral Ecology of Fledgling Brown-headed Cowbirds and Their Hosts ... *Paul W. Woodward* 151
Effects of Human Disturbance on Reproductive Success in the Black Skimmer ... *Carl Safina* and *Joanna Burger* 164
A Contextual Analysis of Two Song Variants in the Bobolink ... *James F. Wittenberger* 172

CONTENTS, VOLUME 85, 1983

NUMBER 1 (February)

Dynamics of Incubation in Mountain White-crowned Sparrows ... *Eileen Zerba* and *Martin L. Morton* 1
Breeding Biology of the Xantus' Murrelet ... *Kelvin G. Murray, Kathy Winnett-Murray, Zoe A. Eppley, George L. Hunt, Jr.,* and *Douglas B. Schwartz* 12
Relationships between Tidal Oscillations and Ruddy Turnstone Flocking, Foraging, and Vigilance Behavior ... *Robert C. Fleischer* 22
Quantitative Analysis of Prairie Grouse Vocalizations ... *Donald W. Sparling* 30
Influence of Incubation Calls on Post-hatching Responses of Pheasant Chicks ... *E. D. Bailey* 43
Hatching of Forster's Terns ... *Martin K. McNicholl* 50
Effects of Dietary Protein Levels on Body Weight, Food Consumption, and Nitrogen Balance in Ruffed Grouse ... *Patrick R. Beckerton* and *Alex L. A. Middleton* 53
The Metabolic Rate of Tropical Birds ... *C. J. Hails* 61
Nesting Ecology of Thick-billed Parrots ... *Dirk V. Lanning* and *James T. Shiflett* 66
Survival of Mallard Broods in South-central North Dakota ... *Larry G. Talent, Robert L. Jarvis,* and *Gary L. Krapu* 74
Status of a Northern Population of California Brown Pelicans ... *Daniel W. Anderson* and *Franklin Gress* 79

SHORT COMMUNICATIONS

Melampitta gigantea: Possible Relation between Feather Structure and Underground Roosting Habits ... *Jared M. Diamond* 89
Spontaneous Blink Rates of Birds ... *Suzanne J. Kirsten* and *Edward B. Kirsten* 92
Nest Predation in Insular and Mainland Lowland Rainforest in Panama ... *Bette A. Loiselle* and *William G. Hoppes* 93
Additions to the Avifauna of Bolivia, Part 2 ... *J. V. Remsen, Jr.* and *Melvin A. Traylor, Jr.* 95
Fledging Dates and Southward Migration of Juveniles of Some *Calidris* Sandpipers ... *Dennis R. Paulson* 99
Plumage Characteristics of Juvenile Black-chinned Hummingbirds ... *Frank A. Baldridge* 102
A New Age- and Sex-specific Molt Scheme for the Red-winged Blackbird ... *Hamilton Greenwood, Patrick J. Weatherhead* and *Rodger T. Titman* 104
Mate Replacement in Purple Martins: Little Evidence for Altruism ... *Charles R. Brown* 106
Water Loss from Pipped Wedge-tailed Shearwater Eggs ... *T. N. Pettit* and *G. C. Whittow* 107
Variation in the Egg Markings of the Brown-headed Cowbird ... *Alfred M. Dufty, Jr.* 109
Seasonal Variation in Nest Placement of Abert's Towhees ... *Deborah M. Finch* 111
Flight Song and Song Flight in the Orange-crowned Warbler ... *William M. Gilbert* 113
INFORMATION FOR CONTRIBUTORS ... 114
NEWS AND NOTES ... 116
RECENT PUBLICATIONS ... 29, 49, 60, 65, 73, 118

NUMBER 2 (May)

Foraging Niches and the Structure of Forest Bird Communities in Contrasting Montane Habitats ... *Stephen R. Sabo* and *Richard T. Holmes* 121
Feeding Rates of Warblers in Spring ... *Jean W. Graber* and *Richard R. Graber* 139
Behavioral Ecology of Fledgling Brown-headed Cowbirds and Their Hosts ... *Paul W. Woodward* 151
Effects of Human Disturbance on Reproductive Success in the Black Skimmer ... *Carl Safina* and *Joanna Burger* 164
A Contextual Analysis of Two Song Variants in the Bobolink ... *James F. Wittenberger* 172

Gut Size, Body Weight, and Digestion of Winter Foods by Grouse and Ptarmigan ..... *Robert Moss* 185
The Composition of Petrel Eggs ..... *John Warham* 194
Breeding Ecology of the Mississippi Kite in Arizona ..... *Richard L. Glinski* and *Robert D. Ohmart* 200
Nest Success and Nesting Habits of Eastern Kingbirds and Other Flycatchers .. *Michael T. Murphy* 208
Structure of Display Flights in the Least Sandpiper ..... *Edward H. Miller* 220
Bias in Density Estimates to Movement of Birds ..... *Stephen L. Granholm* 243

SHORT COMMUNICATIONS

Allopreening by Brown-headed Cowbirds ..... *Thomas A. Webber* 249
Possible "Deceptive" Use of Song by Female Black-headed Grosbeaks ..... *Gary Ritchison* 250
Hummingbirds Feeding from Exudates on Diseased Scrub Oak
Peter G. Kevan, Sherrene D. St. Helens, and *Irene Baker* 251
Records of Allen's Hummingbird in Louisiana and Possible Rufous × Allen's Hummingbird Hybrids ..... *Nancy L. Newfield* 253
Identification and Occurrence of Blackpoll Warblers in Southern Middle America
F. Gary Stiles and *Rafael G. Campos* 254
Predation on Steamer-Ducks by Killer Whale
Roberto Straneck, Bradley C. Livezey, and *Philip S. Humphrey* 255
Ross' Geese Increasing in Central North America ..... *Robert B. Frederick* and *Rex R. Johnson* 257
Occurrence of Willow Warbler (*Phylloscopus trochilus*) in North America Refuted
Don Roberson and *Frank A. Pitelka* 258
COMMENTARY 259
NEWS AND NOTES 262
RECENT PUBLICATIONS 138, 163, 171, 199, 207, 219, 248

NUMBER 3 (August)

Nest Sites and Eggs of Kittlitz's and Marbled Murrelets
Robert H. Day, Karen L. Oakley, and *David R. Barnard* 265
Patterns of Colony Attendance and Censusing of Auklets at Buldir Island, Alaska
G. Vernon Byrd, Robert H. Day, and *Eric P. Knudtson* 274
The Role of the Feet in Behavioral Thermoregulation of Hummingbirds ..... *Miklos D. F. Udvardy* 281
Seabirds between Alaska and Hawaii ..... *Patrick J. Gould* 286
Breeding Biology of Wedge-tailed Shearwaters at Kilauea Point, Hawaii
G. Vernon Byrd, Daniel I. Moriarty, and *Barry G. Brady* 292
Birds of the Kimbe Bay Area, West New Britain, Papua New Guinea
Mary LeCroy and *W. S. Peckover* 297
Pellets of Cape Cormorants as Indicators of Diet ..... *David Cameron Duffy* and *L. J. B. Laurenson* 305
Song Features as Species Discriminants in American Warblers (Parulidae)
R. E. Lemon, J. Struger, and *M. J. Lechowicz* 308
A Review of Duetting, Sociality and Speciation in Some African Barbets (Capitonidae)
Lester L. Short and *Jennifer F. M. Horne* 323
Summer Water Turnover Rates in Free-living Chukars and Sand Partridges in the Negev Desert
A. Allan Degen, Berry Pinshow, and *Philip U. Alkon* 333
Paralytic Shellfish Poisoning: Effects on Breeding Terns ..... *Ian C. T. Nisbet* 338
Female-Female Pairings in Caspian Terns ..... *Michael R. Conover* 346
First Observations of Brown Fat in Birds ..... *L. W. Oliphant* 350
Brood Parasitism of the Abert's Towhee: Timing, Frequency, and Effects ..... *Deborah M. Finch* 355
Long-tailed Hermit Hummingbird Visits to Inflorescence Color Morphs of *Heliconia irrasa*
Lucinda A. McDade 360

SHORT COMMUNICATIONS

A Shift in the Morph Ratio Cline in the Bananaquit on Grenada, West Indies
Joseph M. Wunderle, Jr. 365

Observations of Emperor Geese Feeding at Nelson Lagoon, Alaska ..... *Margaret R. Petersen* 367
Aerial Insect-catching by American Kestrels ..... *Seri G. Rudolph* 368
Diet, Capture Success, and Mode of Hunting by Female American Kestrels in Winter
Michael W. Collopy and *James R. Koplin* 369
Seed Manipulation by Clark's Nutcracker
Kenneth G. Bunch, Gary Sullivan, and *Diana F. Tomback* 372
Diurnal Activity and Social Displays of Rhinoceros Auklets on Teuri Island, Japan
Asa C. Thoresen 373
The Natal Pterylosis of *Amphispiza* Sparrows ..... *Dennis Minsky* and *Charles T. Collins* 375
Distribution and Migration of the Black Tern in Mexico ..... *Sartor O. Williams III* 376
Effect of Mate Loss on Song Performance in the Plain Titmouse ..... *L. Scott Johnson* 378
NEWS AND NOTES 381
THE BULLETIN BOARD 382
RECENT PUBLICATIONS 291, 304, 322, 345, 349

NUMBER 4 (November)

Analysis of Geographic Variation in the Townsend's Warbler ..... *Michael L. Morrison* 385
Avian and Vegetation Community Structure and Their Seasonal Relationships in the Lower Colorado River Valley ..... *Bertin W. Anderson, Robert D. Ohmart,* and *Jake Rice* 392
Plumage-Molt-Age Relationships in "Over-Summering" and Migratory Lesser Golden-Plovers
Oscar W. Johnson and *Patricia M. Johnson* 406
Molting Adaptations of Rock Ptarmigan on Amchitka Island, Alaska
Erling E. Jacobsen, Jr., Clayton M. White, and *William B. Emison* 420
The Food, Feeding, and Development of Young Tufted and Horned Puffins in Alaska
D. H. S. Wehle 427
Pigments and Feather Structure of the Redpolls, *Carduelis flammea* and *C. hornemanni*
Declan M. Troy and *Alan H. Brush* 443
Nesting Biology of the Rosy Finch on the Aleutian Islands, Alaska ..... *Richard E. Johnson* 447
Notes on the Behavior of the Melodious Blackbird (*Dives dives*) ..... *Gordon H. Orians* 453
Cavity Use by Secondary Cavity-Nesting Birds and Response to Manipulations ..... *Timothy Brush* 461
Feeding Behavior in Laughing Gulls: Compensatory Site Selection by Young
Joanna Burger and *Michael Gochfeld* 467
Seasonal Patterns in Roosting Flocks of Starlings and Common Grackles
Donald F. Caccamise, Linda A. Lyon, and *Joseph Fischl* 474
Sharing of Vocal Signals among Song Sparrows ..... *Myron Charles Baker* 482
Reproductive Behavior by a Female Songbird: Differential Stimulation by Natal and Alien Song Dialects ..... *Kimberly J. Spitler-Nabors* and *Myron Charles Baker* 491

SHORT COMMUNICATIONS

A Bathing Assembly of Blue-vented Hummingbirds (*Amazilia saucerottei*) in Costa Rica
Stephen C. Trombulak 495
"Walking-in-Line" Behavior in Sage Sparrow Territorial Encounters ..... *Terrell Rich* 496
A First Record of the Nest and Chicks of the Small Kauai Thrush
Cameron B. Kepler and *Angela K. Kepler* 497
Nest of the Red-stained Woodpecker (*Veniliornis affinis*) from Southeastern Peru
Thomas Bates Smith 499
Breeding Range Expansion of Bell's Vireo in Grand Canyon, Arizona
Bryan T. Brown, Steven W. Carothers, and *R. Roy Johnson* 499
First Nesting Record for Boreal Owl in Idaho ..... *Gregory D. Hayward* and *Edward O. Garton* 501
Analysis of Peregrine Falcon Eggs in Ecuador
J. Peter Jenny, William A. Burnham, Tjitte de Vries, Nancy Hilgert, and *Fernando Ortiz* 502
Determining Sex Ratios from Collected Specimens ..... *Joanna Burger* 503

Diving Depths of the Gentoo Penguin (*Pygoscelis papua*)
Nigel J. Adams and *Christopher R. Brown* 503
RECENT PUBLICATIONS 391, 442, 446, 466, 490
NEWS AND NOTES 505
STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION 505
INDEX TO VOLUME 85 508